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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Allen J. Brenneman

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EXAMINER

MUI, CHRISTINE T

ART UNIT

PAPER NUMBER

1797

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/576,992	BRENNEMAN, ALLEN J.	
	Examiner	Art Unit	
	Christine T. Mui	1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06 March 2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. It is unclear to the examiner what is means by "second first component slots" on line 2 of claim 5.
4. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. It is unclear to the examiner what is means by "second first component slots" on line 2 of claim 23.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 3-9, 11, 13-14, 16-18, 21-24 and 26 are rejected under 35

U.S.C. 102(b) as being anticipated by USP 5,371,020 to Frischauf (submitted on the Information Disclosure Statement on 06 March 2007; herein referred Frischauf.

3. Regarding claims 1 and 19, the reference Frischauf discloses a device to be used in photometric in vitro determination of a content of an analyte in a sample. The measuring chamber device used is part of an analyzer having an optical unit. The measuring chamber device consists of two identical halves. Each of the two halves have pins in the half that engages mating while they engage in the recesses in the other half. There is a line of material outlined in the halves where it lies along the edge of a longitudinal open conduit that centrally expands transversely and forms a measuring chamber with a through hole perpendicular to the conduit. The through hole is covered by a window, which is mimicked on the other half (see column 6, line 48-column 7, line 22, abstract, Figures 1A-1C).

4. Regarding claim 3, the reference Frischauf discloses the line of material is outlined in the first half where it lies along the edge of a longitudinal open conduit and forms a measuring chamber. It can be see in Figure 1B, the line of material and longitudinal conduit is formed in each half of the measuring chamber device. On the second half, there is a through hole as well that is covered by a similar window where the optical unit able to apply radiation or another source of light to the sample in the measuring chamber (see Figure 1B, column 6, lines 63-67, column 7, lines 4-8).

5. Regarding claim 4, the reference Frischauf discloses the halves of the measuring chamber device are made by means of injection moulding of a transparent "soft" plastic

material. The chamber also has a through hole that is directed perpendicular to the conduit that is covered by windows on each half (see column 6, line 53-58, column 7, lines 1-9, Figure 1B).

6. Regarding claim 5, the reference Frischauf discloses a through hole that is directed perpendicular to the conduit and line of material on the halves. The through hole is covered by a window and the corresponding through hole is covered by a similar window on the other half (see column 6, line 64 - column 7, line 7, Figure 1B).

7. Regarding claim 6, the reference Frischauf discloses the through hole in the second half is covered by a window which is also the same through hole on the first half covered by a window (see column 6, line 64 - column 7, line 7; Figure 1B).

8. Regarding claim 7, the reference Frischauf discloses the measuring chamber is made up of two identical halves (see column 6, line 54; Figure 1A-1C).

9. Regarding claim 8, the reference Frischauf discloses the two halves are assembled by pins in the first half engaging mating in the recesses of the second half. The pins in the second half engage in the recesses of the first half. The two halves are welded together by means of ultrasonic welding (see column 6, lines 58-64).

10. Regarding claim 9, the reference Frischauf discloses the halves are made by means of injection moulding of a transparent "soft" plastic material where it can be in optical communication with the radiation source and the through hole in the first half is covered by window (see column 5, lines 7-9, column 6, lines 54-56, column 7, lines 1-3).

11. Regarding claim 11, the reference Frischauf discloses method for the photometric in vitro determination of the content of an analyte in a sample. A measuring chamber device comprises of two identical halves where the halves are assembled by pins in each half that engage mating in the recesses of the second half. The two halves are welded together by means of ultrasonic welding. There is a line of material outlined in the halves and lies along the edge of a longitudinal open conduit that centrally expands transversely and forms a measuring chamber with through hole directed perpendicular to the conduit. The through hole is covered by a window that is the same on each half of the measuring device (see column 6, line 48 - column 7, line 25).

12. Regarding claim 13, the reference Frischauf discloses halves of the measuring device are welded together by means of ultrasonic welding (see column 6, lines 62-63).

13. Regarding claim 14, the reference Frischauf discloses the measuring chamber device in which the two halves are assembled by pins in the first half engaging mating in the recesses of the second half and the pins of the second half engage in the recesses of the first half (see column 6, lines 58-61).

14. Regarding claim 16, the reference Frischauf discloses the measuring chamber in a method of photometric in vitro determination of the content of an analyte in a sample provides the chamber for holding the sample (see claim 1). It is interpreted by the examiner that the sample is a reagent where it is in contact with the read surfaces of each half of the measuring chamber.

15. Regarding claim 17, the reference Frischauf discloses the measuring chamber device with a through hole that is covered by a window and the corresponding through

window on the second half is covered by a similar window (see column 7, lines 3-9, Figure 1B). It can be seen in Figure 1B, the windows covering the through holes of the device are aligned on opposite sides of the measuring device.

16. Regarding claim 18, the reference Frischauf discloses halves of the measuring chamber device are made by means of injection moulding of a transparent "soft" plastic material. It is also preferred that the measuring chamber device with a partially transparent wall part be in optical communication with the radiation source. The device has a through hole which is covered by a window on each side (see column 5, lines 6-10, column 6, lines 54-58, column 7, lines 3-9, Figure 1B).

17. Regarding claim 21, the reference Frischauf discloses the measuring device with a line of material outlined in a half of the device and the line of material lies along the edge of a longitudinal open conduit that centrally expands transversely and forms a measuring chamber with a through hole that is perpendicular to the conduit (see column 6, line 64 - column 7, line 7, Figure 1B).

18. Regarding claim 22, the reference Frischauf discloses the halves of the measuring chamber device are made by means of injection moulding of a transparent "soft" plastic material. Each half of the measuring device has a through hole disposed in the half covered by a window that is subjected to optical communication with the radiation source and radiation detector (see column 5, lines 7-10, column 6, lines 54-58, column 6 line 64 - column 7, line 7). It can be seen in Figure 1B the windows disposed on each half of the measuring device are aligned with each other to form an optical path for radiation.

19. Regarding claims 23-24, the reference Frischauf discloses a longitudinal open conduit that is formed in the halves of the measuring device that expands transversely and forms a measuring chamber (see column 6, lines 64 – column 7, line 7; Figure 1B). It is interpreted by the examiner that the slots are the conduit disposed in the halves of the device.

20. Regarding claim 26, the reference Frischauf discloses the halves of the measuring device are welded together by means of ultrasonic welding where the pins of one half are engaged in the recesses of the other half and vice versa (see column 6, lines 58-63).

Claim Rejections - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

22. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

23. Claims 2, 10, 12, 20 and 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frischauf.

24. Regarding claim 2, the reference Frischauf discloses the claimed invention except for where the first and second pin-hole interfaces are joined with adhesive. Frischauf discloses the two halves of the measuring chamber device are welded together by means of ultrasonic welding (see column 6, lines 62-63). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an adhesive instead of welding as adhesive is an alternative way of joining pieces together to ensure a tight seal between two objects and to reduce the labor cost of welding.

25. Regarding claim 10, the reference Frischauf discloses the claimed invention except for where the formats are held together via friction. Frischauf discloses that the halves are held together by welding by means of ultrasonic welding and the pins and the recess of the first half engage in the pins and recesses of the second half. It can be interpreted by the examiner that where the pins and recesses engage in each others halves initiates contact between the two entities which is friction that can hold the formats together. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use friction through the engagement of pins and recess to hold the formats together without welding or other sticking or adhesive means to reduce the cost of producing the device and eliminating the labor involved in welding or applying adhesives.

26. Regarding claim 12, the reference Frischauf discloses the claimed invention except for applying an adhesive to a pin on the first half of the device. Frischauf discloses the halves of the measuring chamber are welded together by means of ultrasonic welding (see column 6, lines 62-64). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use an adhesive between the halves of the measuring device to stick the halves together rather than welding them together to eliminate costs associated with ultrasonic welding with machines and labor to ensure the tight seal between two halves of device.

27. Regarding claim 20, the reference Frischauf discloses the claimed invention except for where the inner surface interfaces are substantially free of adhesive or intervening material. Frischauf discloses the instant measuring device halves are welded together by means of ultrasonic welding (see column 6, lines 62-63). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the format's interfaces be free of any adhesive or any other intervening material to ensure proper readings by the optical device and to remove any contaminants or foreign materials that may alter the radiation readings.

28. Regarding claim 25, the reference Frischauf discloses the claimed invention except for where the pin of the first format is adhesively attached to the second format hole. Frischauf discloses the pins of the first half are engaged in the recesses of the second half while the pins of the second half are engaged in the recess of the first half. The halves of the device are held together by ultrasonic welding (see column 6, lines 58-63). It would have been obvious to one having ordinary skill in the art at the time the

invention was made to adhesive connect the pin to the recesses of each half to ensure a secure fit between the halves with less labor intensive work and a more simple application of securing means.

29. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frischauf as applied to claim 11 above, and further in view of USP 5,035,494 to Foldenauer (submitted on the Information Disclosure Statement on 06 March 2006; herein referred "Foldenauer").

30. Regarding claim 15, the reference Frischauf discloses the claimed invention except for where the formats are of a chain formation. Foldenauer discloses the claimed invention except for a molded plastic article assembly mean which comprises of a cover member in position above a base member for removable engagement. The cover member is formed with a plurality of cover slips over slide plates (see Figure 1, column 3, lines 4-8). It is interpreted by the examiner that the plurality of slips on the cover member that corresponds to each slide plate of the base member, is in a chain formation where one plate is sequentially followed by another. It would have been obvious to one having ordinary skill in the art at the time the invention was made to place the formats in a formation of a chain to provide a plurality of measuring devices in a row for multiple detection and simultaneous reaction observation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine T. Mui whose telephone number is (571) 270-3243. The examiner can normally be reached on Monday-Friday 8-5; Alternate Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CTM


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